| L Number | Hits | Search Text | DB | Time stamp |
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| 1 | 558 | (353/31).CCLS. | USPAT; US-PGPUB | 2003/03/31 13:27 |
| 2 | 383 | ((353/31).CCLS.) and color | USPAT | 2003/03/31 13:28 |
| 3 | 52 | ((353/31).CCLS.) and color same purity | USPAT | 2003/03/31 13:29 |

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TITLE: Liquid crystal projector

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col. 2 lines 3-10

Color purity compensation filters FR, FG and FB are respectively arranged on the light-incident sides of the individual display elements 1R, 1G and 1B, so that the color purities of the red, green and blue lights R, G and B separated by the color-separating dichroic mirrors DM1 and DM2 are compensated for by those filters FR, FG and FB, respectively, before entering the respective display elements 1R, 1G and 1B.

col. 2 lines 17-25

Accordingly, of the red, green and blue lights R, G and B, the green light G of an intermediate waveband includes the red and blue components though slightly, while the red light R and blue light B slightly includes the green component. If the different-color components included in those lights R, G and B are cut off by the color purity compensation filters FR, FG and FB, lights R, G and B with high color purity can enter the respective display elements 1R, 1G and 1B.

col. 5 lines 9-18

Conventionally, therefore, the transmission wavebands of the color purity compensation filters FR, FG and FB located on the light-incident sides of the respective display elements 1R, 1G and 1B are narrowed to restrict the wavebands of the red, green and blue lights R, G and B to be incident to the display element 1R, 1G and 1B as shown in FIG. 3, thereby narrowing the

wavebands of the red, green and blue image lights Ra, Ga and Ba which
respectively leave the display elements 1R, 1G and 1B.

col. 7 line 58-68

As shown in FIG. 2, the wavebands of the red light R and the green light G
separated by the color-separating dichroic mirrors DM1 and DM2 lap over each
other around 600 nm, and the wavebands of the green light G and the blue light
B lap over each other around 500 nm. In the liquid crystal projector of this
embodiment, color purity compensation filters FR, FG and FB are also arranged
on the light-incident sides of the respective display elements 10R, 10G and 10B
so that lights R, G and B with high color purity can enter the respective
display elements 10R, 10G and 10B.

col. 12 line 53 - col. 13 line 3

According to the liquid crystal projector of this embodiment, as described
above, even if the spectral characteristics of the first and second dichroic
mirrors DM21 and DM22 shift due to the shifting of the incident angle of light,
every wavelength of the image lights Ra, Ga and Ba can pass the first and
second color-combining dichroic mirrors DM21 and DM22 or can be reflected
thereat, thereby providing full-color image light RaGaBa with well-balanced
colors, and, unlike in the prior art, it is unnecessary to narrow the wavebands
of image lights from individual display elements. It is therefore possible to
widen the transmission wavebands of the color purity compensation filters FR,
FG and FB located on the light-incident sides of the individual display
elements 10R, 10G and 10B to increase the amount of light incident to each
display element 10R, 10G or 10B, thus permitting projection of high-quality
color image light with high brightness and free of color irregularity.

col. 15 lines 11-19

In the liquid crystal projector of this embodiment,

therefore, it is also
possible to widen the transmission wavebands of the color purity compensation
filters FR, FG and FB located on the light-incident sides of the individual
display elements 10R, 10G and 10B to increase the amount of light incident to
each display element, thus permitting projection of high-quality color image
light with high brightness and free of color irregularity.

col. 14 lines 14-18

While the color purity compensation filters FR, FG and FB are provided on
the light-incident sides of the respective display elements 10R, 10G and 10B in
the first to fourth embodiments, the compensation filters should not
necessarily be provided.

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Removable